POSTER PRESENTATIONS

STATUS OF RAPTORS IN ARGENTINA

BELLOCQ, M.I. *Faculty of Forestry, University of Toronto, 33 Willcocks St., Toronto, Ontario M5S 3B3 Canada*

A total of 78 species of raptors occur in Argentina (vultures: five species; eagles, hawks, and kites: 40 species; falcons and caracaras: 15 species; owls: 17 species; and the osprey). Habitat deterioration, however, is limiting the distribution of several species, some of which are already restricted to protected areas. Approximately 73% of Argentinean raptors have been classified as scarce, uncommon, or hypothetically present in the country. In the Red Data Books of 1990–92, the status of eight raptors were classified as rare, undetermined or insufficiently known in Argentina. Of the 40 raptor species known to inhabit the wet forest of northern Argentina, 25 of them were classified as scarce or uncommon, presumably due to deforestation and hunting of prey. An apparent recovery of raptors in northern Patagonia during the 1980s seems related to decreasing human persecution. During the 1990s, Argentina has quickly begun to develop an increasing awareness of wildlife conservation through education.

A NEW MODEL FOR DISPERSAL IN SCREECH-OWLS: CORTICOSTERONE, BODY CONDITION, AND BEHAVIOR

BELTHOFF, J.R. AND A.M. DUFTY, JR. *Raptor Research Center and Department of Biology, Boise State University, Boise, ID 83725 U.S.A.*

In virtually all birds and mammals, juveniles of one or both sexes leave their natal area before breeding. In screech-owls (*Otus asio* and *O. kennicottii*), both sexes of young disperse, but there is variation in the timing of dispersal within and among broods. We developed a model that explains dispersal in screech-owls and similar nonmigratory species where young birds obtain and defend territories following dispersal. The model is based on interactions among body condition, hormones, and social stimuli. We hypothesize that corticosterone secretion increases just prior to dispersal, through a combination of endogenous and external events. Rising plasma corticosterone may stimulate increased movement, but the precise effect on dispersal timing depends on the body condition of the bird. Juveniles with sufficient body condition and fat reserves will disperse when corticosterone rises. Birds in poor body condition or with poor reserves will not, but they will increase foraging activity until they obtain the necessary body condition to disperse. We will review results of preliminary field and laboratory studies that examine predictions of the model, and we will discuss future directions of the work.

A SIMPLE AND EFFECTIVE BURROWING OWL (*SPEOTYTO CUNICULARIA*) TRAP

E.S. BOTELHO AND P.C. ARROWOOD. *Department of Biology, New Mexico State University, Las Cruces, NM 88003-0001 U.S.A.*

A new trap designed to safely live-trap burrowing owls (*Speotyto cunicularia*) in the most inaccessible burrows was developed and tested on the campus of New Mexico State University in Las Cruces, New Mexico. The trap consists of a 61 cm piece of 10.16 cm diameter PVC pipe in which two (or one depending on the application) plexiglas one-way doors are installed. A hinged door is installed in the tube in order to remove captured owls safely and easily. The trap is inserted into the burrow and the space between the tunnel and the trap filled with mesh screen. This trap possesses the following advantages over other burrowing owl traps: it is easy to transport from burrow to burrow, it is easy to install even in difficult to reach burrows, and it is completely safe (no owl has ever been injured using this trap). This trap has been used to capture both adults and nestlings in southern New Mexico.

HABITAT SELECTION AND REPRODUCTIVE BIOLOGY OF LOGGERHEAD SHRIKES IN EASTERN CANADA

CHABOT, A., D.M. BIRD AND R.D. TITMAN. *Avian Science and Conservation Centre of McGill University, Ste. Anne de Bellevue, Quebec H9X 3V9 Canada*

The status and distribution of endangered loggerhead shrikes (*Lanius ludovicianus*) in southern Ontario and Quebec was studied during the 1991 and 1992 breeding seasons. Shrikes returned from wintering areas in April and egg-laying commenced from the end of April to early May. The population of loggerhead shrikes in eastern Ontario was roughly 50 pairs over three core areas, each associated with a limestone plain. Only one breeding pair was located in Quebec in 1991 and two in 1992. Shrikes nested in hawthorn (*Crataegus* spp.), red cedar (*Juniperus virginiana*) and other species, most often in actively grazed pastures. Suitable historic nesting sites were reoccupied and there was a high rate of reoccupancy of 1991 sites in 1992. Breeding territory selection was affected by the amount of habitat fragmentation around a site, but nest site selection appeared to be random within a suitable territory. Shrikes nesting in Ontario had a high rate of reproductive success (50–93%); however, only half of the eggs produced young that survived the 3–4 wk postfledging to become independent (2.30 of 4.91 in 1991 and 2.50 of 5.56 in 1992). Shrikes were found to renest several times and double brooding was observed.

BREEDING BIOLOGY OF THE ZONE-TAILED HAWK AT THE LIMIT OF ITS DISTRIBUTION.

CROWE, D. *Department of Biological Sciences, University of Nevada-Las Vegas, Las Vegas, NV 89154 U.S.A.* P.L. KENNEDY AND T. DEAN. *Department of Fishery and Wild-*